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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,458	07/17/2003	Wen-Shiou Lou	0941-0791P	9177
2292	7590	12/15/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			STOCK JR, GORDON J	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/620,458

Applicant(s)

LOU ET AL.

Examiner

Gordon J. Stock

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20051014;20030717</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. The drawings received on July 17, 2003 have been accepted by the Examiner.

### *Information Disclosure Statement*

2. The information disclosure statements (IDS) submitted on July 17, 2003 and October 14, 2005 have been considered by the examiner.

### *Priority*

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-2** are rejected under 35 U.S.C. 102(b) as being anticipated by **Hirose et al. (JP 10-047920) –cited by applicant using machine translation.**

As for **claims 1-2**, Hirose in a calibration method discloses the following: defining a three-dimensional coordinator x-y-z (Drawing 1: 4, 3, 5); providing a calibrating surface (Fig. 4: 1); translating the calibrating surface along the z-axis to establish a first mapping table of a two-dimensional image to the z-coordinate (paragraphs 0033-0036) and rotating the calibrating surface by a predetermined first along the y axis then translating along the z-axis to establish a second mapping table of the two-dimensional digital image to the z-coordinate according to the

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first mapping table (paragraphs 0025-paragraphs 0028); rotating the calibrating surface by a predetermined second angle along the x-axis then translating along the z-axis to establish a third mapping table of the two dimensional digital image to the y-coordinate according to the first mapping table (paragraphs 0011-paragraphs 0015).

6. **Claims 3-8** are rejected under 35 U.S.C. 102(b) as being anticipated by **Hirose et al. (JP 10-047920)** –cited by applicant using machine translation in evidence of **Sano et al. (JP-08-035828)**—cited by applicant.

As for **claim 3**, Hirose in a calibration method discloses the following: providing a base plane (base plane supporting 2 and 4 of Drawing 1); a laser sensor (Drawing 1: 4), a flat block having a calibrating surface (Drawing 1: 1 and 2c); a rotating axis perpendicular to the base plane (y axis of Drawing 1); a translating axis perpendicular to the rotating axis (z axis of Drawing 1); projecting the laser light onto the calibrating surface (Drawing 1: light projection); adjusting the laser light parallel to the base plane (Drawing 3); adjusting the flat block such that the calibrating surface is perpendicular to the translating axis (suggested by Drawing 1); translating the flat block to a plurality of predetermined first calibrating positions along the translating axis then recording corresponding images made by the laser sensor at each calibrating position and rotating the flat bloc a predetermined angle along the rotating axis, translating the flat block to a plurality of predetermined second calibrating positions along the translating axis, then recording corresponding images made by the laser at each second calibrating position. As a for a light plane, Hirose demonstrates a plane of light in Drawing 1 and suggests a linear beam in Drawing 3. In evidence Sano discloses in a 3-d measurement calibration method a linear curtain of laser light for coordinate system calibration (Fig. 2: 2).

As for **claim 4**, Hirose in a calibration method discloses the following: a base plane (base plane supporting 2 and 4 of Drawing 1); a laser sensor fixed to the base plane (Drawing 1: 4); a calibrating mechanism fixed to the base plane having a flat block with a calibrating surface thereon (Drawing 1: 1 and 2a-2c); wherein a light plane is projected onto the calibrating surface forming a line such that the laser sensor senses and generates a digital image of the line (Drawings 1 and 3; paragraph 0011). In evidence Sano discloses in a 3-d measurement calibration method a linear curtain of laser for coordinate system calibration (Fig. 2: 2).

As for **claim 5**, Hirose in evidence of Sano discloses everything as above (see claim 4). In addition, Hirose discloses the calibrating mechanism further has a rotating portion (Drawing 1: 2b and 2c) including a rotating axis perpendicular to the base plane (Drawing 1: y axis); wherein the flat block rotates along the rotating axis by the rotating portion (Drawing 1: 2b and 2c; paragraph 0011).

As for **claims 6-8**, Hirose in evidence of Sano discloses everything as above (see **claim 5**). In addition, Hirose discloses a translating portion, slider (Drawing 1: 2a) including a translating axis perpendicular to the rotating axis (z axis of Drawing 1) wherein the flat block translates along the translating axis by the translating portion (Drawing 1: 2a; paragraph 0011); rotatable platform driven by a motor connected to a reduction mechanism, gonio-slewing gear with rotary table (Drawing: 2b and 2c); translating portion is a linear guide way, direct acting slider (Drawing 2: 2a).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent 4,188,544 to Chasson

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U.S. Patent 4,682,894 to Schmidt et al.

U.S. Patent 6,798,527 to Fukumoto et al.

*Fax/Telephone Numbers*

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and

2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

*Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: (571) 273-8300*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (571) 272-2431.

The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached at 571-272-2800 ext 77.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

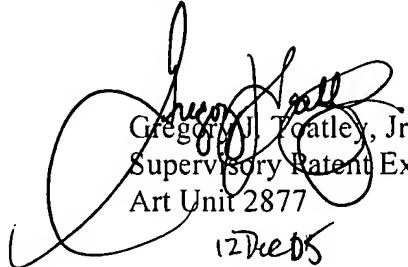
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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private Pair system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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December 9, 2005



Gregory J. Toatley, Jr.  
Supervisory Patent Examiner  
Art Unit 2877  
12 Dec 05